ber of colonies obtained on making plates. In most instances there was a progressive rise in the number of bacteria. Micrococci, pneumococci, streptococci, Bacillus coli, and Bacillus typhosus were tested. They recommend the dry sterilization of Erlenmeyer flasks containing 0.5 gram NnCl in substance. This is sufficient for 10 c.c. of blood. Transfer to media can be made when desired, and after twenty-four hours will give as many, if not more, colonies as if made at once.

A Metabolism Test for Gout.—Burian and Schur have shown that of the uric acid produced from intaken purin bases, 50 per cent. is excreted in the urine. Block found little variation for the same individuals, but that in different patients the rapidity of excretion varies considerably. In normal patients on a purin-free diet, the uric acid output returns to its original endogenous level usually within three, always within five, days after a single dose of purin bases. HÖSSLIN and KATO (*Deut. Arch. f. klin. Med.*, 1910, xcix, 301) have used this test to distinguish gout from other forms of arthritis. In all cases they determined the uric acid output on a purin-free diet, and then after giving 1 to 1.5 grams of sodium nucleinate. In two of the three gout cases the uric acid was still high on the seventh day. The third case at first showed no prolongation of the total excretion time, but the maximum excretion was retarded, occurring on the second day after the injection. On retesting this case, a definite prolongation of excretion time was found. In none of the other forms of arthritis was any abnormality in uric acid excretion found. The gout cases tested were not extremely pronounced. In one, the clinical diagnosis was only cleared by a typical joint which developed after the laboratory findings had been made.

The Inhibition of Exudate and Transudate Formation by Calcium Salts.—CHIARI and JANUSCHKE (*Wien. klin. Woch.*, 1910, xxiii, 427) have tested experimentally the power of calcium to inhibit exudate and transudate formation in animals. In dogs, the intravenous injection of 0.8 gram of sodium iodide per kilogram of body weight is fatal; a constant autopsy finding is an accumulation of fluid in the pleural and pericardial sacs. Thiosinamin has a similar effect. A like result is obtained in guinea-pigs following the injection of diphtheria toxin. The authors have treated dogs and guinea-pigs with the above-mentioned substances, one-half receiving the poisons alone (controls), the second half being given subcutaneous injections of calcium chloride in addition. Without exception, the animals treated with calcium showed no effusions into the pleural and pericardial sacs, while the untreated animals constantly had fluid in excess. Treatment with calcium chloride also had a marked inhibiting effect on œdema caused by the application of mustard oil to the conjunctiva of the rabbit. The authors suggest that calcium salts be tried in the treatment of pleural and pericardial effusions in man.

The Absorption of Pleural Exudate after Exploration and Puncture.—LEVY-VALENSI and POUZIN (*Bull. et mém. de la Soc. méd. des hôp. de Paris*, 1910, xxvii, 3 s., 265) describe the effect which is produced on pleural effusions by the withdrawal of very small amounts in exploratory

tappings. In seven cases of pleural effusion they took out amounts of fluid varying from 10 to 20 c.c., and in five instances the remaining effusion began to be nbsorbed quickly, so that the signs had almost disappeared inside of n week. In one of the two unsuccessful cases the withdrawal of 500 c.c. of fluid was shortly afterward followed by a reaccumulation. On the other hand, when absorption followed exploratory puncture the fluid never returned. On account of the simplicity and harmlessness of the method, the authors believed it to be well wortb using in cases in which the symptoms nre not urgent.

SURGERY.

UNDER THE CHARGE OF

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A New Treatment for Burns.—NEUMAYER (*Deut. Ztschr. f. Chir.*, 1910, clv, 615) says that the three most important indications to be met in burns are: (1) To alleviate the intense pain, (2) to favor the quick and smooth covering of the burned area with new skin, and (3) to prevent as far as possible the occurrence of infection. Neumayer believes that we have found in Klnpp's chirosoter a means which meets these indications and that it is very simple and cheap. In burns of the first degree the solution is simply sprayed on the area covered by the hurn and a sterilc dressing npplied. In burns of the second degree the vesicles are cut nway completely with scissors and forceps and their contents removed by washing with normal salt solution. The whole area of the burn is then sprayed with the chirosoter and a sterile dressing applied. In hurns of the third degree all sloughs that are not hanging loosely are allowed to remain in place and the hurn is sprayed and dressed as in the other varieties. All loosely attached necrotic shreds are removed entirely, nnd all discharge washed away with salt solution. When all sloughs are separated healthy granulations are usually present and exuberant granulations rare. The first dressing is allowed to remain several days, this being determined by the nmount of wound secretion. Neumayer has employed this treatment in 30 cases with marked success. The first effect of the spraying is to produce some burning, hut almost immediately nfterward in most cases the pain passes off. When the pain still gives trouble, nlypin is added to the chirosoter, in the strength of a 1 per cent. solution, and this gives complete relief from pain. It is claimed for this treatment that a smooth, nlmost invisible scar results, usually without a tendency to contraction. Con-

traction did occur in one case, hut its effects were overcome with light gymnastics. The treatment is especially valuahle where two hurned areas lie against each other, since it prevents their adhesion. To recommend it are its simplicity, cheapness, avoidance of infection, accelerating influence on healing, favorahle effect on cicatrization, and ameliorating effect on pain.

The Diagnosis and Treatment of Unilateral Hemorrhagic Nephritis.—FRONNEHTEINE (*Ann. d. mal. d. org. gén.-urin.*, 1910, xxviii, 1, 897) says that one of the most serious symptoms of genito-urinary disease is hematuria. The presence of hlood in the urine is the first symptom which attracts the attention of the patient and causes him to seek assistance from a physician. Fronnehtéine reports the case of a patient, aged thirty-two years, who entered the hospital on account of ahundant hematuria which had lasted for a month. The hematuria was accompanied hy constricting pain in the right side of the upper ahdomen. The father had suffered from nephritis and one of his hrothers had had hlood in his urine. Cystoscopic examination showed that the hlood was coming from his right kidney. In the presence of profound anemia and the failure of medical treatment nephrectomy was performed. The results of operation were very satisfactory. The removed kidneys presented the changes of a hemorrhagic nephritis. Ahundant hemorrhages arising from the kidney depend always upon an anatomical lesion of the renal parenchyma, and there can be no hemorrhage without an anatomical lesion. Insignificant anatomical changes may be the cause of ahundant renal hemorrhages. An acute hemorrhagic nephritis may be hilateral or unilateral, and in the latter case it ought to be differentiated, under the name of hematuric nephritis, from cases of hematuria due to tumor. Israel's symptom, that is, the presence in the urine of vermiform clots, occurs especially in hematuric nephritis, and in this condition surgical intervention is indicated.

The Representation of Hypertrophied Prostate by the Skiagraph.—BURCKHARDT and FLOERCKEN (*Deut. Zischr. f. Chir.*, 1910, cv, 110) say that the condition of the middle lobe and the anatomical relations of the hypertrophied prostate to the hladder often make the diagnosis difficult. Palpation through the rectum, as a rule, fails completely, and the use of an inflexible sound often fails to give reliahle information. The use of the cystoscope is rendered difficult hy the projection of the prostate into the hladder and hy the presence of infection. These writers have already called attention to the value of filling the hladder with oxygen for cystoscopy and radioscopy. It is striking how distinct in form and size foreign hodies in the hladder are shown on the *x*-ray plate when oxygen is employed to fill the hladder beforehand. This is accomplished either with a catheter directly from the oxygen tank or by means of a 3 per cent. peroxide solution in a flask with potassium permanganate added. From the flask the developing oxygen is passed through the catheter into the bladder. The introduction of the oxygen is stopped as soon as the filling of the bladder is indicated by a feeling of slight tension on the part of the patient. The bladder should be emptied throroughly before it is filled with the oxygen. A two-way catheter may be employed with one way closed until the oxygen is being

introduced, when through the other opening any fluid in the bladder may be slowly evacuated. The skiagram then taken with the use of a compression apparatus will give very distinctly the exact contour of the bladder and any change in it produced by a projecting portion of the prostate at the neck of the bladder. Six illustrations are given, showing very well the effect of the oxygen in outlining the limits of the bladder and the isolated hypertrophy of the middle lobe. This method may be of advantage in deciding the operation to be performed.

Inflammatory Tumors of the Sigmoid Flexure.—ARNSPERGER (*Mitt. a. d. Grenzgeb. d. Med. u. Chir.*, 1910, xxi, 557) refers to a case seen twelve months before, in which a diagnosis of carcinoma of the sigmoid flexure was made. The growth was excised successfully and the examination of the specimen showed that it was inflammatory in nature. Recently a second case was observed, in which at postmortem, the diagnosis of carcinoma was made, and only by a microscopical examination was its inflammatory nature established. A third patient operated on died and the microscopic examination showed the tumor to be inflammatory and to be formed about a number of diverticula filled with pus, one of which had perforated. The greater number of the circumscribed and localized chronic inflammations of the large intestine are specific and most of them tuberculous in nature. The place of election for their occurrence is in the cecum near the ileocecal valve, although the localized tuberculous disease is found in the sigmoid flexure. Localized subacute and chronic inflammations with the formation of large tumors occur in the sigmoid and are sharply defined from the sound portion of the bowel. They are hard in consistency, with an inclination to adhesions to the surrounding structures, and clinically resemble carcinomas completely. In connection with specific disease and inflammation about a diverticulum, there occurs a simple process which localizes itself in the subserous tissues and sets up a dissecting infiltration. The mucous membrane remains intact, the muscularis hypertrophies, and stenosis may be absent. Because of the impossibility of distinguishing, clinically, between such an inflammatory tumor and a carcinoma, resection of the diseased portion is indicated whenever it is possible. When there is marked stenosis, a very acute inflammatory condition, or the tumor is inoperable, colostomy is indicated. In all doubtful cases an exploratory laparotomy should be done and a piece of the tumor should be removed for microscopic examination.

Concerning the Etiology of Myositis Ossificans.—EWALD (*Zntralbl. f. Chir.*, 1910, xxxviii, 771) says that it is generally admitted that the bone formation in myositis ossificans is found only in certain muscles, as the brachialis internus and quadriceps femoris, especially in the vastus externus portion, and very rarely in the gluteal muscles, deltoid, coracobrachialis, and masseter. Numerous causes have been offered, but there is no explanation of why the process showed such predilection for these two places, while all parts of the trunk and extremities are frequently exposed to wounds and contusions. It is always found near joints. Ewald refers to a case of an acquired dislocation of the